## **AMENDMENT**

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (original) A power tool, comprising:
  - a working element for performing a task on a workpiece;
  - a light source arranged to project a beam of light adjacent the interface between the working element and the workpiece; and
  - a detector configured to detect the presence of a human body part in the beam of light, wherein the detector is communicatively coupled to the power tool so as to stop operation of the working element, if a human body part is detected.
- 2. (currently amended) The power tool of claim 1, wherein the working element is at least one of a circular saw blade, a band saw blade, a drill bit, a cutter head, [[and]] or a router bit.
- 3. (original) The power tool of claim 1, wherein the light source is an infrared source, a near-infrared source, a combination near-infrared/infrared source, a visible light source, a combination near-infrared/visible source, an ultraviolet source, a combination ultraviolet/visible source, a coherent light source, or a far-infrared source.
- 4. (original) The power tool of claim 1, further comprising a countermeasure device communicatively coupled to the detector, said countermeasure device being constructed for stopping the working element if a human body part is detected.
- 5. (original) The power tool of claim 4, wherein the countermeasure device is a

mechanical break, a sacrificial brake, an electric brake, or a removal device.

- 6. (original) The power tool of claim 1, wherein the light source projects a zone generally about the working element.
- 7. (original) The power tool of claim 1, further comprising an indicator configured to provide a visual indication of a detection zone.
- 8. (original) A saw, comprising:
  - an arbor constructed for mounting a circular saw blade thereto;
  - a light source arranged so as to project a beam of light adjacent the circular saw blade; and
  - a detector configured to detect the presence of a human body part in the beam of light, wherein the detector is communicatively coupled so as to stop the rotation of the circular saw blade, if a human body part is detected.
- 9. (original) The saw of claim 8, wherein the light source is an infrared source, a near-infrared source, a combination near-infrared/infrared source, a visible light source, a combination near-infrared/visible source, an ultraviolet source, a combination ultraviolet/visible source, a coherent light source, or a far-infrared source.
- 10. (original) The saw of claim 8, further comprising a countermeasure device communicatively coupled to the detector, said countermeasure device being constructed to prevent contact between the human body part and the circular saw blade if the saw is operating.
- 11. (original) The saw of claim 10, wherein the countermeasure device is a mechanical break, a sacrificial brake, an electric motor brake, or a removal device.

- 12. (original) The saw of claim 8, wherein the light source projects a beam of light defining a zone generally about the circular saw blade.
- 13. (original) The saw of claim 8, wherein the projected light beam defines a point adjacent the circular saw blade.
- 14. (original) The saw of claim 8, further comprising an indicator configured to provide a visual indication of a detection zone.
- 15. (original) The saw of claim 8, wherein the light source is a near-infrared light source.
- 16. (original) The saw of claim 8, wherein the detector is a diffuse reflectance electrooptical detector.
- 17. (original) The saw of claim 8, wherein the detector is configured to detect the presence of a human body part in at least two discrete locations with respect to the circular saw blade.
- 18. (original) The saw of claim 8, wherein the detector is configured to initiate passive stopping of the circular saw blade at a remote position and active stopping of the circular saw blade at a proximal position, based on detection of a human body part, with respect to the circular saw blade.
- 19. (original) The saw of claim 8, wherein the light source and the detector are automatically re-enabled when the saw is activated.
- 20. (original) The saw of claim 8, wherein the detector is an Indium-Gallium-Arsenic based detector.

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- 22. (original) The saw of claim 8, wherein the light source and the detector are configured as a fiber optic probe.
- 23. (original) A table saw, comprising:
  - a support surface for at least partially supporting a workpiece;
  - an arbor constructed for mounting a circular saw blade thereto, said arbor being configured so as to extend the circular saw blade through the support surface;
  - a light source arranged to project a beam of light adjacent the circular saw blade; and
  - an electro-optical detector configured to detect the presence of a human body part in the beam of light,
  - wherein the detector is communicatively coupled to the saw so as to stop the rotation of the circular saw blade, if a human body part is detected.
- 24. (original) The table saw of claim 23, wherein the light source is an infrared source, a near-infrared source, a combination near-infrared/infrared source, a visible light source, a combination near-infrared/visible source, an ultraviolet source, a combination ultraviolet/visible source, a coherent light source, or a far-infrared source.
- 25. (original) The table saw of claim 23, further comprising a countermeasure device communicatively coupled to the detector, said countermeasure device being constructed to prevent contact between the human body part and the circular saw blade if the saw is operating.
- 26. (original) The table saw of claim 25, wherein the countermeasure device is a mechanical break, a sacrificial brake, an electric motor brake, or a removal device.
- 27. (original) The table saw of claim 23, wherein the light source projects a beam of light defining a zone generally about the circular saw blade.

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- 28. (original) The table saw of claim 23, wherein the projected light beam defines a point adjacent the circular saw blade.
- 29. (original) The table saw of claim 23, further comprising an indicator configured to provide a visual indication of a detection zone.
- 30. (original) The table saw of claim 23, wherein the light source is a near-infrared light source.
- 31. (original) The table saw of claim 23, wherein the electro-optical detector is a diffuse reflectance electro-optical detector.
- 32. (original) The table saw of claim 23, wherein the detector is configured to detect the presence of a human body part in at least two discrete locations with respect to the circular saw blade.
- 33. (original) The table saw of claim 23, wherein the electro-optical detector is configured to initiate passive stopping of the circular saw blade at a remote position and active stopping of the circular saw blade at a proximal position, based on detection of a human body part, with respect to the circular saw blade.
- 34. (original) The table saw of claim 23, wherein the light source and the electro-optical detector are automatically re-enabled when the saw is activated.
- 35. (original) The table saw of claim 23, wherein the electro-optical detector is an Indium-Gallium-Arsenic based detector.
- 36. (original) The table saw of claim 23, wherein the light source and the electro-optical

detector are configured as a fiber optic probe.

- 37. (withdrawn) An optical proximity device for a saw, comprising:
  - a light source arranged to project a beam of light adjacent to a circular saw blade; and an electro-optical detector configured to detect the presence of a human body part in the beam of light,
  - wherein the detector is communicatively coupled to the saw so as to stop the rotation of the circular saw blade, if a human body part is detected.
- 38. (withdrawn) The optical proximity device of claim 37, wherein the light source is an infrared source, a near-infrared source, a combination near-infrared/infrared source, a visible light source, a combination near-infrared/visible source, an ultraviolet source, a combination ultraviolet/visible source, a coherent light source, or a far-infrared source.
- 39. (withdrawn) The optical proximity device of claim 37, further comprising a countermeasure device communicatively coupled to the detector, said countermeasure device being constructed to prevent contact between the human body part and the circular saw blade during operation.
- 40. (withdrawn) The optical proximity device of claim 39, wherein the countermeasure device is a mechanical break, a sacrificial brake, an electric motor brake, or a removal device.
- 41. (withdrawn) The optical proximity device of claim 37, wherein the light source projects a beam of light defining a zone generally about the circular saw blade.
- 42. (withdrawn) The optical proximity device of claim 37, further comprising an indicator configured to provide a visual indication of a detection zone.

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- 43. (withdrawn) The optical proximity device of claim 37, wherein the electro-optical detector is a diffuse reflectance detector.
- 44. (withdrawn) The optical proximity device of claim 37, wherein the electro-optical detector is configured to initiate passive stopping of the circular saw blade at a remote position and active stopping of the circular saw blade at a proximal position, based on detection of a human body part, with respect to the circular saw blade.
- 45. (withdrawn) The optical proximity device of claim 37, wherein the light source and the electro-optical detector are automatically re-enabled when the saw is activated.
- 46. (withdrawn) The optical proximity device of claim 37, wherein the electro-optical detector is an Indium-Gallium-Arsenic based detector.
- 47. (withdrawn) The optical proximity device of claim 37, wherein the light source and the electro-optical detector are configured as a fiber optic probe.
- 46. (withdrawn) An optical proximity device for a saw, comprising: means for detecting the presence of a human body part in the beam of light projected adjacent a saw blade; and means for stopping operation of the saw blade, if a human body part is detected in the light beam.
- 47. (withdrawn) The optical proximity device of claim 46, wherein the stopping means includes a countermeasure device constructed to prevent contact between the human body part and the saw blade during operation.
- 48. (withdrawn) The optical proximity device of claim 47, wherein the countermeasure

device is a mechanical break, a sacrificial brake, an electric motor brake, or a removal device.

- 49. (withdrawn) The optical proximity device of claim 46, further comprising an indicator configured to provide a visual indication of a detection zone.
- 50. (withdrawn) The optical proximity device of claim 46, wherein the detecting means is a diffuse reflectance detector.